

REMARKS

Reconsideration of the pending claims is respectfully requested in view of the above amendments and following remarks made in light of newly identified documents referred to below.

Claim 1 is amended to require that the inkjet recording medium comprises as the top layer a porous, swellable, foamed polymer ink receiving layer. Reference to the capability of the ink receiving layer to absorb dye from an applied ink within the polymer instead of being held in pores located in between particles thereby improving stability is removed from the claim, although any implication that it lacks this capability is denied.

The amendments to the claims are supported by the specification including the Examples.

Entry of the present amendments is respectfully requested, since they address the issues identified by the examiner, clearly distinguish from the cited references and place the application in condition for allowance.

Rejection under 35 USC 112

Claims 1, 4-13 and 16-18 were rejected as failing to comply with the written description requirement. In particular, the examiner identified in claim 1 the following, which were alleged not to be present in the application as originally filed:

- ...the ink receiving layer is essentially capable of absorbing ink
- ...an applied ink within the polymer...
- ...instead of being held in pores...
- ...pores located in between particles...
- ...improving stability...

Claims 1, 4-13 and 16-18 were further rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In particular, the

examiner stated that:

a) in claim 1, it is not clear with regard to “essentially capable” if the layer actually absorbs the dye or is merely capable of absorbing the dye.

b) in claim 1, line 6/7, there is no antecedent basis of “the polymer”.

c) in claim 1, line 7, there is no antecedent basis for “particles”. There is no indication particles had been coated.

d) in claim 1, “improving stability” is vague in that the basis for comparison is unclear, and it is also not defined whose stability is being referred to.

Claim 1 has been amended to delete from claim 1 the passage “wherein the ink receiving layer is essentially capable of absorbing dye from an applied ink within the polymer instead of being held in pores located in between the particles thereby improving stability”, against which all the rejections under 35 USC 112 were made, in light of which said rejections are now addressed. Any implication that may arise from the deletion of this passage as to limitations of the benefits or capabilities of the inkjet receiver presently claimed are denied.

Reconsideration and withdrawal of the rejection are in order.

Rejections under 35 USC 102 & 103

The Examiner has stated that should the alleged new matter be removed from claim 1 in response to the 112 rejection (discussed above), rejections over EP 1060901 and KR2000-0063640 will be made. In expectation of such rejections, arguments are submitted below, with reference to previous rejections raised by the examiner, as to the allowability of the present claims.

Potential Rejection under 35 USC 102(b) over EP 1060901

Claim 1 was rejected under 35 U.S.C. § 102(b) in the Office Action of October 26 2005 as being clearly anticipated by EP 1060901.

According to that Office Action, '901 teaches forming a porous base layer for an inkjet recording element by applying a hydrophilic polymer such as gelatin or PVA plus blowing agent to a support (page 4, lines 4-37). In response to the Applicant's argument that the base layer is a sponge layer for absorbing ink and not an ink-receiving layer, the Examiner states that the base layer, by absorbing ink, is acting as an ink-receiving layer. For at least the following reasons, Applicant traverses the rejection.

EP 1060901 relates to an image recording element for ink jet ink and comprises a support, an absorbent base layer and a top layer that is ink receptive. It discloses on page 4, lines 22-23 that a porous structure may be introduced into the base layer by the addition of ceramic or hard polymeric particulates, by foaming or blowing during coating or by inducing phase separations in the layer through the introduction of non-solvent. It is also disclosed at page 4, line 12 that the base layer is primarily intended as a sponge layer for the absorption of ink, i.e. not an image-receiving layer, which is the purpose of the top layer.

Amended claim 1 concerns a method of making an inkjet medium comprising a support and a porous, swellable, foamed polymer ink receiving layer *on top of the inkjet medium*, wherein said support is selected from the group consisting of resin coated paper, film base, acetate and polyethylene terephthalate, said method comprising the steps of: coating a support with a solution comprising a swellable hydrophilic polymer and a blowing agent or simultaneously coating a support with a plurality of solutions, each comprising a swellable hydrophilic polymer and a blowing agent; and either prior to or after the step of coating said support, causing said blowing agent to generate gas bubbles within the solution or solutions, causing foaming of said hydrophilic polymer, thereby forming one or a plurality of ink-receiving layers, including at least the porous, swellable, foamed polymer ink receiving layer.

'901 does not disclose the use of a hydrophilic polymer and a blowing agent to cause foaming of the hydrophilic polymer to form a porous, swellable, foamed polymer ink receiving layer as the top layer or image receiving layer, as

required by present claim 1. '901 only discloses the possible use of a blowing agent and the coating material to generate a porous structure in the base layer, for use as a sponge layer or sump for absorption of ink solvent.

Accordingly, it is submitted that '901 does not disclose nor suggest the subject matter of claim 1. For at least the above reasons, a rejection made against Claim 1 under 35 USC § 102 is not appropriate.

Potential Rejection under 35 USC § 103(a) over EP 1060901

Claims 5-12 and 16-18 were rejected, in the office action dated October 26 2005 under 35 U.S.C. § 103(a) as allegedly unpatentable over EP 1060901. According to the Office Action, '901 fails to teach the weight percent of blowing agent, the presence of surfactants, plural simultaneous coatings or foaming by heat. The Office Action states that it would have been obvious to one of ordinary skill in the art to have optimized the weight percent of the composition through no more than routine experimentation, that applying a plurality of coating solutions is a mere variation on typical coating practices, that additives that are well known in the art may be added (including surfactants) and that foaming by heating blowing agents is well known in the art. The Office Action states that whilst '901 fails to teach the blowing agents of claim 18, any conventional blowing agents would be operational of the '901 process. In response to the Applicant's argument that '901 teaches that the base layer does not have to be porous, the Office Action states that paragraph [0022] of '901 teaches that the base layer may be a porous structure and may be made so by foaming or blowing during coating and thereby it is the Examiner's position that a porous base layer is sufficiently taught. For at least the following reasons, Applicant traverses the rejection.

It is submitted that claims 5-12 and 16-18 are not obvious over EP 1060901 at least by virtue of their dependence on amended claim 1, which, it is submitted, is patentable over the cited documents.

As set out above, amended claim 1 concerns a method of making an inkjet medium-comprising a support and *a porous, swellable, foamed polymer ink receiving layer on top of the inkjet medium*, wherein said support is selected from the

group consisting of resin coated paper, film base, acetate and polyethylene terephthalate, said method comprising the steps of: coating a support with a solution comprising a swellable hydrophilic polymer and a blowing agent or simultaneously coating a support with a plurality of solutions, each comprising a swellable hydrophilic polymer and a blowing agent; and either prior to or after the step of coating said support, causing said blowing agent to generate gas bubbles within the solution or solutions, causing foaming of said hydrophilic polymer, thereby forming one or a plurality of ink-receiving layers, including at least the porous, swellable, foamed polymer ink receiving layer.

As discussed above, EP 1060901 states that porosity can be introduced into the base layer of the ink jet recording element described therein by foaming or blowing during coating, or by other methods, such as adding ceramic particles. The primary purpose of the base layer, however, is as a sponge layer for absorbing the ink fluid and not for receiving the dye image, which is the purpose of the top layer. The top layer, which is the ink-receptive layer, comprises swellable polymers and a crosslinking agent and does not have any porosity introduced. There is no indication or suggestion in EP 1060901 that would lead the skilled person in the art in possession of that document to prepare a foamed ink receptive layer as the top layer. Accordingly, it is submitted that claim 1, and claims 5-12 and 16-18 dependent therefrom, are patentable over EP 1060901.

For at least the above reasons, rejection of the claims under 35 USC § 103(a) is not appropriate.

Potential Rejection under 35 USC § 103(a) over EP 1060901

Claim 13 was rejected in the Office Action of October 26 2005 under 35 USC § 103(a) as being unpatentable over EP 1060901 taken in view of KR 2000-0063640. According to the Office Action, '901 fails to teach adding an acid to react with the blowing agent and '640 teaches adding an acid that decomposes a foaming agent as a process to foam a PVA solution. According to the Office Action, it would therefore be obvious to one of ordinary skill in the art to have used the acid foaming process of '640 because

it teaches that this is a conventional means of foaming a PVA solution. For at least the following reasons, Applicant considers this rejection inappropriate.

It is submitted that claim 13 is not obvious over EP 1060901 in view of KR 2000-006340 at least by virtue of its dependence on amended claim 1, which, it is submitted, is patentable over the cited documents. The reasons are the same as those set out for EP 1060901 above.

US 6,291,127, cited in a Supplemental IDS, mentions foaming but does not anticipate or render obvious the amended claims for the following reasons, which were also set forth in our response to the October 26 2005 Office Action and are restated here for reference.

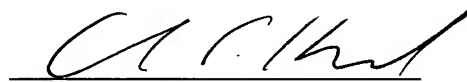
US 6,291,127 (the '127 patent) is primarily concerned with providing a support substrate for an imaging medium, such as thermal dye transfer media, electrophotographic media, photographic media and ink jet media among others, which support substrate is resistant to liquid penetration whilst maintaining a favored fibrous feel, thereby not causing cockling. In particular, the support substrate according to '127 comprises a highly refined, internally sized cellulose paper base that has its surfaces impregnated with a water dispersible ester based condensation polymer such that the impregnated paper exhibits a hydrophobicity as measured by 40/20 Acid Valley in excess of 500 seconds. At column 13, lines 14-17 thereof, it is mentioned that a porous structure may be introduced into ink receiving layers comprised of hydrophilic polymers by foaming or blowing during coating (among other methods), among a large number of other ink receiving layer composition alternatives. There is no disclosure in '127 of using a porous hydrophilic ink receiving layer with any other support substrate and accordingly the currently amended claims are novel over '127. It would appear that the skilled person in the art would not be led by the disclosure of '127 to prepare an inkjet receiver by a method according to the amended claim 1, since there is no reason for the skilled person in the art to refer to '127, the disclosure of which relates to a particular support substrate which is resistant to liquid penetration as opposed

to a support selected from the group consisting of resin coated paper, film base, acetate and polyethylene terephthalate, as required by claim 1.

Furthermore, even if the skilled person were to refer to '127, they would not be led to the method of the present invention since there is not identified in '127 any particular advantage of utilizing a porous ink receiving layer with the support substrate as opposed to any of the many other described ink receiving layers for use in ink jet printing or other imaging methods.

In view of the foregoing remarks, reconsideration of the above identified patent application is respectfully requested. Prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner require anything further, the Examiner is invited to contact Applicant's representative.

Respectfully submitted,



Chris P. Konkol.
Attorney for Applicant(s)
Registration No. 30,721

CPK:clb
Rochester, NY 14650
Telephone: (585) 722-0452
Facsimile: (585) 477-1148